# **PRODUCT** INFORMATION



CAY10444

Item No. 10005033

CAS Registry No.:	298186-80-8	
Formal Name:	2-undecyl-4R-	
	thiazolidinecarboxylic acid	
Synonym:	BML-241 / / /	
MF:	$C_{15}H_{29}NO_2S$	
FW:	287.5 N COON	
Purity:	≥98% <sup> </sup>	
Supplied as:	A crystalline solid	
Storage:	-20°C	
Stability:	≥1 year	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

## Laboratory Procedures

CAY10444 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10444 in the solvent of choice, which should be purged with an inert gas. CAY10444 is soluble in the organic solvent dimethyl formamide (DMF) at a concentration of approximately 0.5 mg/ml.

CAY10444 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10444 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10444 has a solubility of approximately 0.15 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

CAY10444 is a sphingosine-1-phosphate receptor 3 (S1P<sub>3</sub>) antagonist.<sup>1</sup> It inhibits S1P-induced calcium mobilization in CHO cells expressing human S1P<sub>3</sub> (IC<sub>50</sub> = 11.6  $\mu$ M). CAY10444 (5  $\mu$ M) inhibits S1P-induced growth and migration of MH7A rheumatoid fibroblast-like synoviocyte cells.<sup>2</sup> It inhibits the localization and release of IL-1 $\beta$  and prostaglandin E<sub>2</sub> (PGE<sub>2</sub>; Item No. 14010) in MH7A cells when used at a concentration of 5  $\mu$ M. CAY10444 (17.4  $\mu$ M) also inhibits Na<sup>+</sup>/K<sup>+</sup>-ATPase activity in HepG2 cells.<sup>3</sup>

## References

- 1. Koide, Y., Hasegawa, T., Takahashi, A., et al. Development of novel EDG3 antagonists using a 3D database search and their structure-activity relationships. J. Med. Chem. 45(21), 4629-4638 (2002).
- Wang, M., Wu, H., Wang, R., et al. Inhibition of sphingosine 1-phosphate (S1P) receptor 1/2/3 ameliorates 2. biological dysfunction in rheumatoid arthritis fibroblast-like synoviocyte MH7A cells through Gai/Gas rebalancing. Clin. Exp. Pharmacol. Physiol. 48(8), 1080-1089 (2021).
- 3. Al Alam, N. and Kreydiyyeh, S.I. FTY720P inhibits hepatic Na<sup>+</sup>-K<sup>+</sup> ATPase via S1PR2 and PGE2. Biochem. Cell Biol. 94(4), 371-377 (2016).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

## WARRANTY AND LIMITATION OF REMEDY

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# CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM